

Title (en)

GAS TURBINE ENGINE COMPONENT COATING WITH SELF-HEALING BARRIER LAYER

Title (de)

GASTURBINENMOTORKOMPONENTENBESCHICHTUNG MIT SELBSTHEILENDER BARRIERESCHICHT

Title (fr)

REVÊTEMENT DE COMPOSANT DE MOTEUR À TURBINE À GAZ AVEC COUCHE BARRIÈRE AUTORÉPARATRICE

Publication

**EP 4353701 A2 20240417 (EN)**

Application

**EP 24160369 A 20141105**

Priority

- US 201361909074 P 20131126
- EP 14865602 A 20141105
- US 2014064023 W 20141105

Abstract (en)

A component for high temperature applications includes a substrate, a layer of an aluminum-containing MAX phase material and another material applied to the substrate. The layer provides a MAX phase/metal matrix composite including a first MAX phase material. The first MAX phase material has a particle size of between 1-3 microns. The metal matrix is formed from particles having a particle size of 0.02 to 0.5 microns.

IPC 8 full level

**C04B 41/50** (2006.01)

CPC (source: EP US)

**C04B 41/009** (2013.01 - EP US); **C04B 41/5061** (2013.01 - EP US); **C04B 41/5068** (2013.01 - EP US); **C04B 41/87** (2013.01 - EP US); **C23C 4/06** (2013.01 - EP US); **C23C 4/10** (2013.01 - US); **C23C 4/18** (2013.01 - US); **C23C 14/18** (2013.01 - US); **C23C 28/042** (2013.01 - US); **F01D 5/288** (2013.01 - EP US); **F01D 25/00** (2013.01 - EP US); **F02C 7/24** (2013.01 - EP US); **F05D 2300/182** (2013.01 - EP US); **F05D 2300/2261** (2013.01 - EP US); **F05D 2300/2283** (2013.01 - EP US)

C-Set (source: EP US)

EP

1. **C04B 41/009 + C04B 35/565**
2. **C04B 41/009 + C04B 35/584**
3. **C04B 35/806 + C04B 41/009 + C04B 35/565**
4. **C04B 35/806 + C04B 41/009 + C04B 35/584**
5. **C04B 41/5061 + C04B 41/5031 + C04B 41/5057**
6. **C04B 41/5061 + C04B 41/5037 + C04B 41/5057**
7. **C04B 41/5061 + C04B 41/5024 + C04B 41/5057**
8. **C04B 41/5068 + C04B 41/5031 + C04B 41/5063**
9. **C04B 41/5068 + C04B 41/5037 + C04B 41/5063**
10. **C04B 41/5068 + C04B 41/5024 + C04B 41/5063**

US

1. **C04B 41/009 + C04B 35/565**
2. **C04B 41/009 + C04B 35/584**
3. **C04B 41/5061 + C04B 41/5031 + C04B 41/5057**
4. **C04B 41/5061 + C04B 41/5037 + C04B 41/5057**
5. **C04B 41/5061 + C04B 41/5024 + C04B 41/5057**
6. **C04B 41/5068 + C04B 41/5031 + C04B 41/5063**
7. **C04B 41/5068 + C04B 41/5037 + C04B 41/5063**
8. **C04B 41/5068 + C04B 41/5024 + C04B 41/5063**
9. **C04B 41/009 + C04B 35/565 + C04B 35/515**
10. **C04B 41/009 + C04B 35/584 + C04B 35/515**

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2015080839 A1 20150604**; EP 3074619 A1 20161005; EP 3074619 A4 20170426; EP 3074619 B1 20240410; EP 4353701 A2 20240417; US 10273583 B2 20190430; US 11149338 B2 20211019; US 2016289844 A1 20161006; US 2020024749 A1 20200123

DOCDB simple family (application)

**US 2014064023 W 20141105**; EP 14865602 A 20141105; EP 24160369 A 20141105; US 201415036885 A 20141105; US 201916397092 A 20190429